What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. An image sensor integrated circuit comprising:

a row/column array of light sensing pixels in which each column has a readout line, the array receiving an image including bright light that causes photocurrent on a column's readout line, the photocurrent being sufficient to produce a bright light effect in a resulting image;

for each column, compensating circuitry connected to the column's readout line; the compensating circuitry sensing spurious current on the column's readout line when no pixel is providing a signal through the column's readout line, the sensed spurious current including the photocurrent; the compensating circuitry further providing a current compensating for the sensed spurious current while a pixel is providing a signal through the column's readout line, the compensating current preventing the bright light effect in a resulting image.

2. The integrated circuit of claim 1 in which the row/column array is a CMOS image sensing array.

3. The integrated circuit of claim 1 in which the compensating circuitry further comprises:

for each column, switching circuitry for switching the column's compensating circuitry between a sensing mode in which the compensating circuitry senses spurious current and an operating mode in which the column's compensating circuitry provides the compensating current.

4. The integrated circuit of claim 1 in which each column's compensating circuitry comprises:

a set of at least two capacitors, each of which is charged to a respective voltage in sensing spurious current.

5. The integrated circuit of claim 4 in which each column's compensating circuitry comprises a series of at least two cascoded transistors, each with a gate connected for receiving voltage from a respective one of the set of capacitors; the received voltages causing the cascoded transistors to provide the compensating current with approximately the same magnitude as the sensed spurious current.

6. The integrated circuit of claim 5 in which each of the cascoded transistors further has a channel lead for connecting to the transistor's gate and its respective capacitor while sensing spurious current; the cascoded transistors providing a current that balances spurious current being sensed, causing each transistor's respective capacitor to reach its voltage during sensing of spurious current.

7. A system comprising:

a processor; and

an image sensor array device connected to provide signals to the processor; the array device comprising:

a row/column array of light sensing pixels in which each column has a readout line, the array receiving an image including bright light that causes photocurrent on a column's readout line, the photocurrent being sufficient to produce a bright light effect in the column;

for each column, compensating circuitry connected to the column's readout line; the compensating circuitry sensing spurious current on the readout line when no pixel is providing a signal through the readout line, the sensed spurious current including the photocurrent; the compensating circuitry further providing a current compensating for the sensed spurious current while a pixel is providing a signal through the column's readout line, the compensating current preventing the bright light effect in the column.

8. The system of claim 7 in which the image sensor array device comprises a CMOS image sensing IC that includes the row/column array and the compensating circuitry.

9. A method of receiving signals from a CMOS integrated circuit with signal-providing elements that provide signals through a line; the method comprising:

receiving light on the integrated circuit, the light causing photocurrent in the line; and

while one of the signal-providing elements is providing a signal through the line, providing current to compensate for the photocurrent on the line.

10. The method of claim 9, further comprising:

when none of the signal-providing elements is providing a signal through the line, sensing spurious current on the line; the sensed spurious current including the photocurrent;

the compensating current being approximately equal to the sensed spurious current.

11. A CMOS integrated circuit comprising:

a conductive line on which photocurrent is caused when the integrated circuit receives light; and

a plurality of signal-providing elements that provide signals through the line as a result of said integrated circuit receiving light; and

compensating circuitry coupled to the conductive line, the compensating circuitry providing compensating current to compensate for the photocurrent on the conductive line while at least one of the plurality of signal-providing elements is providing a signal through the conductive line.

12. The integrated circuit of claim 11 in which the compensating circuitry comprises:

a cascoded transistor current source that provides the compensating current.

13. A method of receiving signals from light sensing pixels in an image sensor, the pixels providing signals to a plurality of conductive lines of said image sensor in response to bias current on the conductive lines; the method comprising:

providing bias current on each of said plurality of conductive lines, each conductive line receiving signals from one of the pixels via the conductive line; and

providing compensating current to compensate for spurious bias current on each of said plurality of conductive lines.

14. The method of claim 13 in which the spurious bias current is photocurrent.

15. The method of claim 13, further comprising, for each of said plurality of conductive lines:

when none of the pixels is providing a signal through the conductive line, sensing the spurious bias current on the conductive line;

the compensating current being approximately equal to the sensed spurious bias current.

16. Readout circuitry for an image sensor circuit that includes light sensing pixels that provide signals on lines in response to bias current on the lines, the readout circuitry comprising:

bias current circuitry that provides bias current on each of the lines; and

for each line, compensating circuitry connected to the line; each line's compensating circuitry providing current to compensate for spurious bias current on the line while receiving a signal from one of the pixels through the line.

17. The circuitry of claim 16, further comprising:

for each line, sample-and-hold circuitry for receiving signals through the line.

18. A method of receiving signals from a pixel of a CMOS sensor array, the method comprising:

providing a bias current on a conductive line coupled to said pixel and receiving a signal from said pixel on said conductive line in response to said pixel being exposed to light, the light producing photocurrent on the conductive line; and

while receiving the signal, providing compensating current to compensate for the photocurrent on the conductive line.

19. The method of claim 18 in which the light produces the photocurrent in switches for connecting source follower transistors of said pixels to the conductive line.

20. A circuit comprising:

a conductive line;

at least one source follower transistor providing a signal on the conductive line in response to bias current on the conductive line; the at least one source follower transistor providing the signal in response to a photosensitive device coupled to said source follower transistor being exposed to light that produces photocurrent on the conductive line; and

readout circuitry for receiving the signal from the source follower transistor through the conductive line; the readout circuitry comprising:

bias current circuitry that provides bias current on the conductive line; and

compensating circuitry that provides compensating current to compensate for the photocurrent on the conductive line while said signal is received from said at least one source follower transistor via the conductive line.

21. The circuit of claim 20 in which the readout circuitry further comprises:

sample-and-hold circuitry for receiving signals through the line.

22. A method for operating an image sensor, the method comprising:

reading out a signal from at least one pixel of a pixel array via a column line of said pixel array;

sensing a spurious current value on said column line; and

supplying a compensating current to said column line so as to reduce an adverse effect of said spurious current when said at least one pixel is being read out.

23. An image sensor comprising:

a pixel array having at least one column line for reading out a signal from at least one pixel;

a compensating circuit coupled to said at least one column line for sensing a spurious current value on said column line and for supplying a compensating current to said column line so as to reduce an adverse effect of said spurious current when said at least one pixel is being read out.

24. A method of receiving signals from a row/column array of light sensing pixels in which each column has a readout line; the method comprising:

receiving light on the array, the light including bright light that causes photocurrent in the readout line of a column, the photocurrent being sufficient to produce a bright light effect;

when the pixels are not providing signals through the columns' readout lines, sensing spurious current on each column's readout line; the sensed spurious current for the column including the photocurrent; and

while pixels in a row are providing signals through the columns' readout lines, providing a compensating current to compensate for spurious current on each column's

readout line, the compensating current being approximately equal to the readout line's sensed spurious current, the compensating current preventing the bright light effect.

25. The method of claim 24 in which the bright light is the sun and the bright light effect is sun smear.

26. Readout circuitry for receiving signals from a row/column array of light sensing pixels in which each column has a readout line; the readout circuitry comprising:

for each column in the array, compensating circuitry connected to the column's readout line; the compensating circuitry sensing spurious current on each column's readout line when the pixels are not providing signals through the columns' readout lines and providing a compensating current to each readout line to compensate for the spurious current on each column's readout line while pixels in a row are providing signals through the columns' readout lines, the compensating current being approximately equal to the readout line's sensed spurious current;

bright light in an image received on the array causing photocurrent in the readout line of a column, the photocurrent being sufficient to produce a bright light effect in the column, the sensed spurious current for the column including the photocurrent; the compensating current preventing the bright light effect.

27. A compensating circuit for compensating for spurious current on a line, comprising:

a self-biasing current source comprising at least two cascoded transistors;

a respective capacitor connected to the gate of each cascoded transistors; and

switch circuitry for switching the compensating circuit between a sensing mode and an operation mode; in the sensing mode, the current source providing a current to balance spurious current on the line when no signals are being provided on the line, the capacitors reaching voltages at which the cascoded transistors provide the balancing current; in the operation mode, the current source provides current on the line to compensate for spurious current, the cascoded transistors providing the compensating current in response to the voltages from the capacitors.

28. The compensating circuit of claim 27 in which the cascoded transistors are p-channel transistors.

29. The compensating circuit of claim 27 in which the compensating current precisely matches the spurious current.

30. An image sensor integrated circuit comprising:

a row/column array of light sensing pixels in which each column has a readout line, the readout line of a column having spurious current while an image is received by the array;

for each column, compensating circuitry connected to the column's readout line; the compensating circuitry sensing spurious current on the readout line when no pixel is

providing a signal through the readout line and providing current compensating for the spurious current while a pixel is providing a signal through the readout line, the compensating current being approximately equal to the sensed spurious current.

31. The integrated circuit of claim 30 in which the row/column array is a CMOS image sensing array.

32. The integrated circuit of claim 30, further comprising:

for each column, a switch connected for causing the column's compensating circuitry to sense the spurious current when closed and for causing the column's compensating circuitry to provide the compensating current when open.

33. The integrated circuit of claim 30 in which each column's compensating circuitry comprises:

a capacitance; and

a current source connected for supplying current to the column's readout line and for producing voltage across the capacitance; when no signal-providing element is providing a signal through the readout line, the current source supplying current to balance the readout line's spurious current and produce a voltage across the capacitance indicating the spurious current's magnitude; while a pixel is providing a signal through the readout line, the current source providing the compensating current in response to the voltage across the capacitance.

34. A system comprising:

a processor; and

an image sensor array device connected to provide signals to the processor; the array device comprising:

a row/column array of light sensing pixels in which each column has a readout line, the readout line of a column having spurious current while an image is received by the array;

for each column, compensating circuitry connected to the column's readout line; the compensating circuitry sensing spurious current on the readout line when no pixel is providing a signal through the readout line and providing a current compensating for the spurious current to the readout line while a pixel is providing a signal through the readout line, the compensating current being approximately equal to the sensed spurious current.

35. The system of claim 34 in which the input array device comprises a CMOS image sensing IC that includes the row/column array and the compensating circuitry.

36. A method of receiving signals from a row/column array of light sensing pixels; the method comprising:

when the pixels are not providing signals through the columns' readout lines, sensing spurious current on each column's readout line; and

while pixels in a row are providing signals through the columns' readout lines, providing current to compensate for sensed spurious current on each column's readout line, the compensating current being approximately equal to the readout line's sensed spurious current.

37. A CMOS image sensor array integrated circuit, comprising:

a row/column array of light sensing pixels in which each column has a readout line, each pixel in a column including a source follower transistor that provides signals through the column's readout line in response to bias current on the readout line; the array being configured to receive an image including bright light that causes photocurrent on a column's readout line, the photocurrent being sufficient to produce a bright light effect; and

readout circuitry for the array; the readout circuitry comprising, for each column:

bias circuitry that provides bias current on the column's readout line;

sample-and-hold circuitry that receives signals from pixels that are coupled to the column through the column's readout line; and

compensating circuitry connected to the column's readout line; the compensating circuitry sensing spurious bias current on the column's readout line when no pixel is providing a signal through the column's readout line, the sensed spurious bias current including the photocurrent; the compensating circuitry further providing current compensating for the sensed spurious bias current while a pixel is providing a signal

through the column's readout line, the compensating current preventing the bright light effect; the compensating circuitry comprising:

a self-biasing current source comprising at least two cascoded transistors;

a respective capacitor connected to the gate of each cascoded transistors; and

switch circuitry for switching the compensating circuit between a sensing mode and an operation mode; in the sensing mode, the current source providing a current to balance spurious bias current on the line when no signals are being provided on the line, the capacitors reaching voltages at which the cascoded transistors provide the balancing current; in the operation mode, the current source provides current on the line to compensate for spurious bias current, the cascoded transistors providing the compensating current in response to the voltages from the capacitors; the compensating current precisely matching the sensed spurious bias current.